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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,321	03/09/2004	Michel Ouellette	120-332	2122
34845 7590 07/09/2007 McGUINNESS & MANARAS LLP 125 NAGOG PARK ACTON, MA 01720			EXAMINER NGUYEN, BRIAN D	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 07/09/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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<b>Office Action Summary</b>	Application No. 10/796,321	Applicant(s) OUELLETTE ET AL.	
	Examiner Brian D. Nguyen	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,9 and 11-16 is/are rejected.
- 7) ☒ Claim(s) 6-8,10 and 17-21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 3, 10, 16, and 21 are objected to because of the following informalities:

Claims 3 and 4, line 3, it is suggested to replace “indicators” with --indications--.

Claim 10, line 3, “the time period” seem to refer back to “a given monitoring interval” in line 3 of claim 5. If this is true, it is suggested to change “the time period” to --the given monitoring interval--.

Claim 16, line 1, the terms: “capable of” is not positively recited limitations. Therefore, limitations followed this term are not considered claimed limitations. If the applicants want to claim these limitations; it is suggested to delete this term from the claim.

Claim 21, line 2, “the time period” seem to refer back to “a time interval” in line 9 of claim 16. If this is true, it is suggested to change “the time period” to --the time interval--.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 11, and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Lanza fame et al (7,006,511).

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Regarding claim 1, Lanza fame discloses an apparatus comprising: a controller (212 in figure 2); a buffer (208), coupled to the controller, the buffer having a target (see target in step 500 in figure 5) fullness associated therewith and providing the controller with current fullness indications (see actual buffer size in step 504); and wherein the controller includes means for collecting the current fullness indications and means for periodically updating the target fullness of the buffer in response to the current fullness indications (see next target size calculation in col. 8, lines 18-24).

Regarding claim 11, Lanza fame discloses a method for adapting a size of a buffer including the steps of: monitoring a fullness of the buffer to track fullness characteristics of the buffer; and periodically adjusting the size of the buffer in response to the fullness characteristics of the buffer (see col. 2, lines 12-17).

Regarding claim 13, Lanza fame discloses associated with the buffer is an upper threshold, identifying a desired maximum number of data units to be stored in the buffer, and a lower threshold, identifying a minimum number of data units to be stored in the buffer (see target maximum and target minimum in col. 3, lines 13-25).

Regarding claims 14 and 15, Lanza fame discloses the upper threshold is selected to achieve a desired playback offset of data received at the buffer and the lower threshold is selected to minimize data unit loss at the buffer (see col. 3, lines 13-25 where Lanza fame teaches the thresholds (maximum/minimum bounds) and col. 1, lines 31-34 where Lanza fame teaches the effecting of selecting a buffer size. Note that long delay is not desirable for playback).

Regarding claim 16, Lanza fame discloses a method for adapting a size of a buffer capable of receiving packets, the method including the steps of: identifying a target fullness of

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the buffer (see target 500), the target fullness indicating a desired number of packets to be stored in the buffer; assigning an upper threshold and lower threshold to the buffer (see maximum and minimum bound in col. 3, lines 13-25), the upper threshold indicating a maximum number of packets to be stored in the buffer, and the lower threshold indicating a minimum number of packets to be stored in the buffer; monitoring the buffer for a time interval to obtain fullness characteristics of the buffer (see col. 2, lines 12-17); and adjusting the target fullness of the buffer in response to the fullness characteristics of the buffer (col. 2, lines 12-17 and col. 8, lines 22-24).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanzafame in view of Kuriki et al (6,850,537).

Regarding claims 2-4, Lanzafame discloses an upper and a lower threshold (see maximum and minimum bounds in col. 3, lines 13-14) but does not specifically disclose controlling transmission of packets from the buffer such that the controller causes packets to be held in the buffer if the current fullness indications indicate that the lower threshold has been crossed and discard packets if the fullness indications indicate the upper threshold has been crossed. However, these features are well known in the art. Kuriki discloses causing packets to

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be held in the buffer if the current fullness indications indicate that the lower threshold has been crossed (see col. 1, lines 43-48 where Kuriki teaches of inserting a dummy packet in the buffer when the amount of packets in the buffer is less than the lower threshold. In other words, the packets are to be held in the buffer when the amount of packets in the buffer is less than the lower threshold) and discard packets if the fullness indications indicate the upper threshold has been crossed (see col. 1, lines 37-40). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to hold or discard the packets as taught by Kuriki in the system of Lanzafame in order to control the packet fluctuation.

6. Claims 5, 9, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lanzafame in view of Ramakrishnan (7,173,947).

Regarding claims 5 and 9, Lanzafame does not specifically disclose identifying a minimum and maximum fullness of a buffer over a given interval. However, these features are well known in the art. Ramakrishnan discloses identifying a minimum and maximum level of the buffer over a time interval (see col. 9, lines 44-49). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to identify the minimum and maximum fullness of the buffer as taught by Ramakrishnan in the system of Lanzafame in order to evaluate the system performance and adjust the system when needed.

Regarding claim 12, Lanzafame does not specifically disclose the fullness characteristics include a minimum and maximum fullness of a buffer. However, these features are well known in the art. Ramakrishnan discloses these features (see col. 9, lines 44-49). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to

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track the minimum and maximum fullness of the buffer as taught by Ramakrishnan in the system of Lanzafame in order to evaluate the system performance and adjust the system when needed.

***Allowable Subject Matter***

7. Claims 6-8, 10 and 17-21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

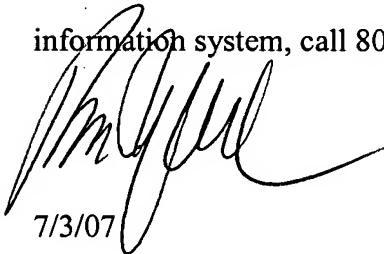
Belk et al (7,106,758) and Buckland et al (6,618,399).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571) 272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



7/3/07

**BRIAN NGUYEN**  
**PRIMARY EXAMINER**